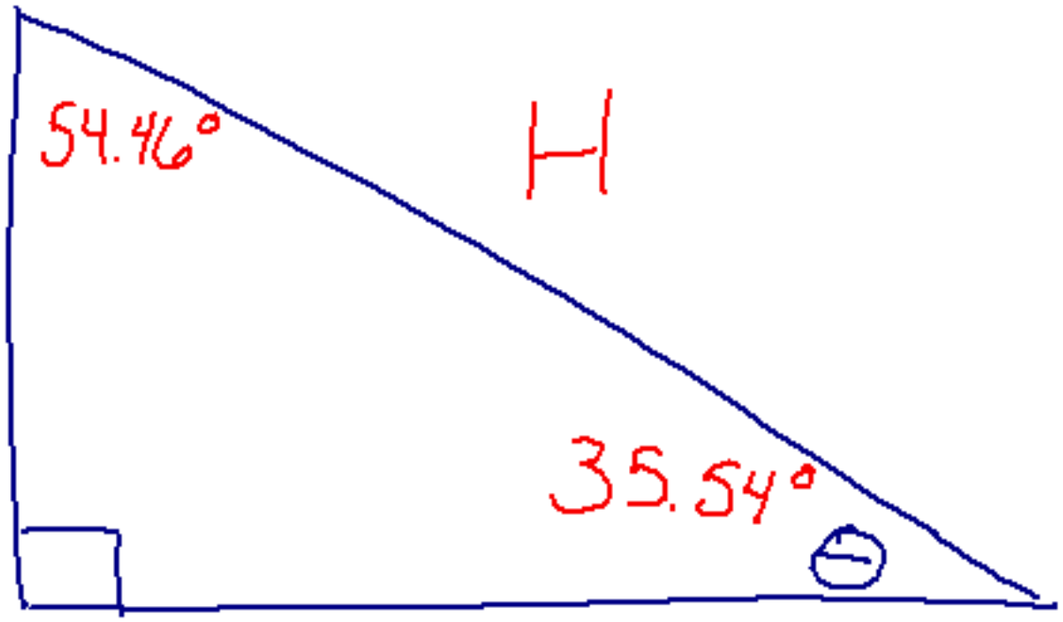
Finding missing angles

Ex 1



$\tan^{-1}\left(\frac{\text{opp.}}{\text{adj.}}\right)$

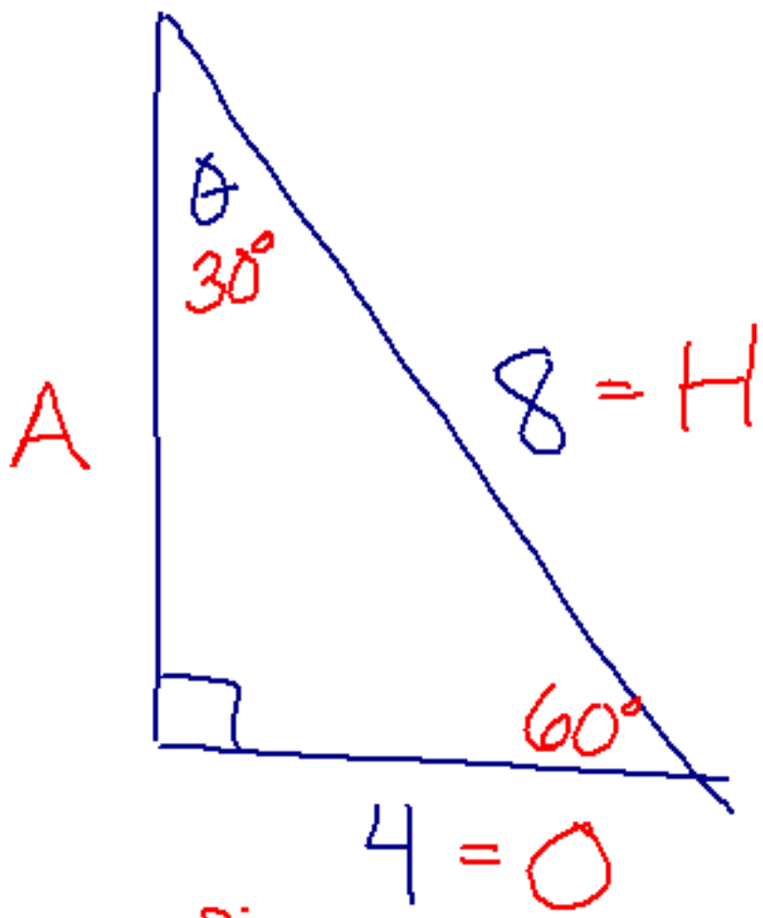
$\tan^{-1}(\tan\theta) = \left(\frac{5}{7}\right)^{\tan^{-1}}$

$\theta = \tan^{-1}\left(\frac{5}{7}\right)$

$7 = A$

$\frac{3x}{3} = \frac{9}{3}$

Ex 2

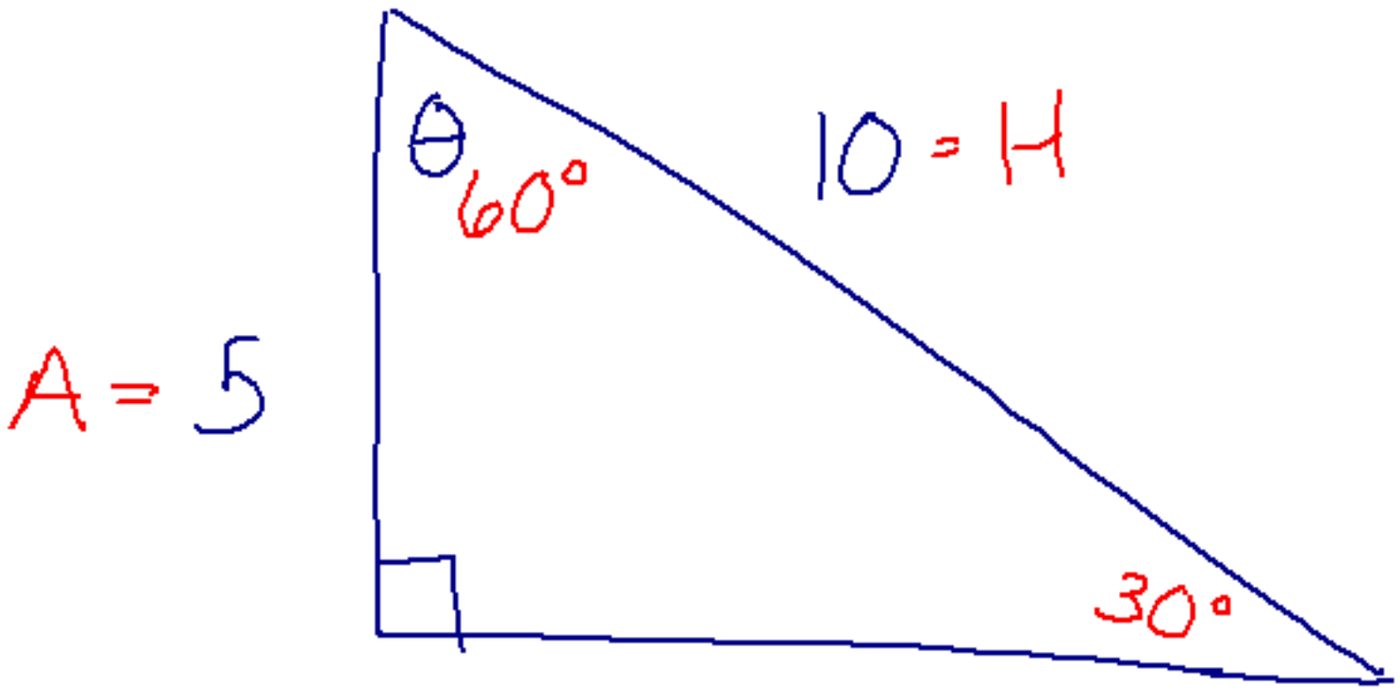


$$\sin^{-1}(\sin\theta) = \sin^{-1}\left(\frac{4}{8}\right)$$

$$\theta = \sin^{-1}\left(\frac{4}{8}\right)$$

$$\theta = 30°$$

Ex. 3



$$\cos^{-1}(\cos\theta) = \cos^{-1}\left(\frac{5}{10}\right)$$

$$\theta = \cos^{-1}\left(\frac{5}{10}\right)$$

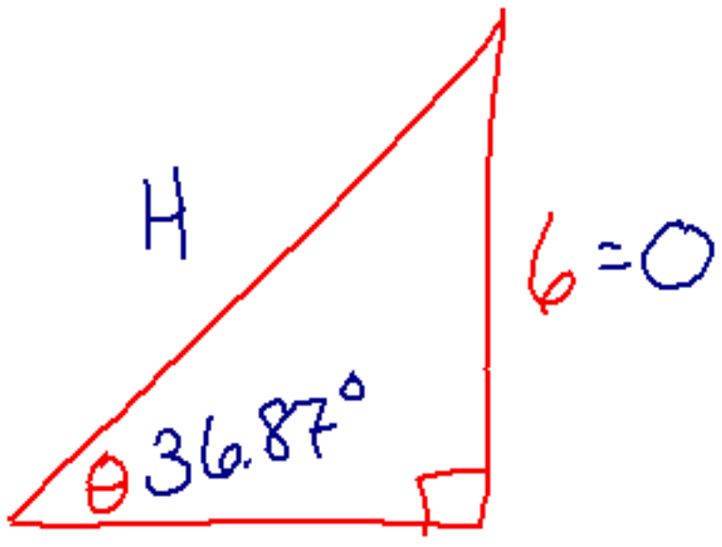
* Sin, Cos, tan used when:

Solving for side measure

* $\sin^{-1}$, $\cos^{-1}$, $\tan^{-1}$ used when:

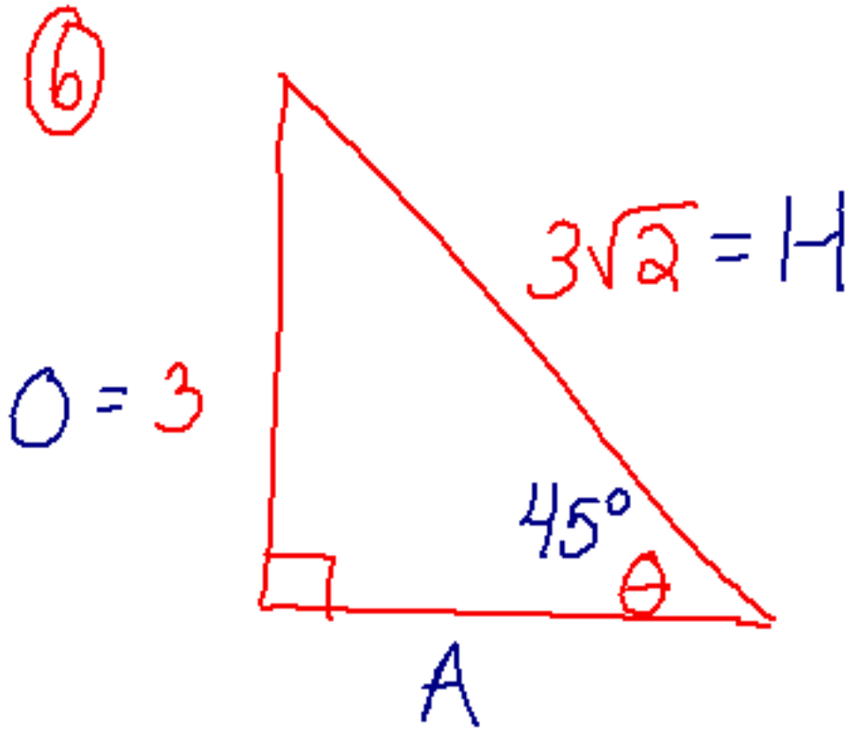
Solving for angle measure

5



$$\tan\theta = \frac{6}{8}$$

6



$$\sin\theta = \frac{3}{3\sqrt{2}}$$